1906, a little more than three years after the previous operation, she came to me for what appeared to be obstruction of the bowels. She was in good flesh, good color, had no fever, and was in excellent condition until this apparent obstruction came on a few days before. Various means were used to get the bowels moved, but without avail. After repeated consultations, and after every effort proved futile, it was decided to open the abdomen and see just where the trouble was. By this time the woman had grown very weak, and upon opening the abdomen there was no evidence of tubercular deposit anywhere, unless the condition I am about to describe was tubercular in character, but the small nodules and tubercular process that had formerly covered the bowel and peritoneum of the abdominal wall had entirely disappeared. But the mesocolon had enlarged to about the size of one's big finger, and had contracted so much that there was very little mobility for the colon which apparently was the cause of the obstinate constipation. The operation of course did no good in this case, and the woman died within the next two days. This is the most remarkable case that has fallen under my observation.

These are only a few of the many cases I have seen, and all except one have been subjected to operative procedure, and all but one have at least apparently recovered in full from the operation, and from the tubercular condition.

Mauclaire in reviewing his own experience in forty-one cases, comparing them with the record of operative treatment by others, says the evidence shows the great progress realized from surgical measures in tuberculous processes in the digestive tract and peritoneum in the last twenty years, but the responsibility for the success of operative measures rests on the attending physician's diagnosis of the process in time. A writer says some recent statistics report 50% of the patients cured while Kullner's lowest figures show after three years' interval 26% cured of twenty-nine patients with the ascitic form, and 10% with the form without effusion.

Another writer says that "Yeo and other medical observers have reported large series of cases treated by non-surgical measures which also showed a recovery rate of nearly or quite 50%. It is probable, as pointed out by Oschner, that the majority of the cases treated surgically were more advanced, and had resisted treatment by purely hygienic and medical measures, and, therefore, the two classes could not with propriety be compared. The consensus of opinion at present is that all early cases should have the advantage of careful hygienic and medical treatment for a reasonable period. If not improved, they should be treated by laparotomy.

William J. Mayo strongly recommends a search for and removal of the primary focus, which, in a large number of cases, will be found in the fallopian tubes or appendix. A failure to remove this, in his opinion, is responsible for many cases of relapse.

Caird describes four types: 1. Exudative form. 2 Exudative form with adhesions. 3. Dry form. 4. Any form in which the peritoneal cavity is practically obliterated or tubercle has invaded the bowel coat. The operation practiced in all cases was simple laparotomy. An attempt was made to find and remove any prominent forms, and on a few occasions diseased tubes and ovaries were removed. Twenty-eight of the 31 cases recovered from the operation. Of the 18 cases that could be followed, nine died after varying intervals; eight are well, dating from periods of one to nine years after operation.

Without going further into details I may say that whilst I do not pretend to explain the manner in which operation cures these cases, yet I feel justified in recommending it as a rule, especially where treatment upon approved lines does not

afford prompt relief. My conclusions then are the following:

First. Tubercular peritonitis is not a very uncommon disease, but occurs most frequently in women, and whilst it may originate from many sources, it seems to be most common in origin about the tubes as the primary seat of infection.

Second. Symptoms are more or less obscure and indefinite, especially in the early stages, and the diagnosis is made oftentimes by exclusion.

Third. There are the two varieties, or the moist and the dry, and heredity may have a predisposing influence in the development of both.

Fourth. The prognosis is fairly good if proper treatment can be given in reasonable time.

Fifth. Treatment may be either medical, hygienic and climatic; or operative, followed by the former.

Sixth. Proper operative treatment should include not only opening the abdominal cavity, but also the removal as far as possible of the original point of infection, as appendix, tubes and ovaries, and thoroughly drying the cavity, and touching up freely with pure carbolic acid all broken down suppurating points, and also removing as much as possible of useless and broken down tissue.

Seventh. Drainage is seldom required, but if there has been much ascites, a large abdominal pad should be applied and a firm bandage should make suitable pressure to prevent the fluid accumulating again, and thus also assist in reabsorption of such fluid as may recur.

COMPOUND FRACTURE OF BOTH FEMURS WITH EXTENSIVE LACERATION OF SOFT PARTS.

By T. W. HUNTINGTON, M. D., San Francisco, and ALVIN POWELL, M. D., Oakland.

This case seems to be worthy of a place in surgical literature, in that it illustrates several important points in the treatment of open fractures, and accentuates, very sharply, at least two or three serious hazards attending such injuries.

Patient: F. K., age, 25 years. Carpenter in the employ of the Western Pacific Railway. Family history, previous history, and habits, unimportant. On September 12, 1913, at 5:30 p. m., patient

was thrown through the open door of a bunk-car, while the train was moving at the rate of fifteen miles per hour. The brakes were suddenly set and the car, in which he was riding, collided with the car preceding it.

There is no evidence that the car wheels passed over either thigh. It seems probable that his injuries were caused by direct violence. He sustained compound fractures of both femurs; the right being extensively comminuted.

There was free hemorrhage from both limbs. He was taken, at once, to the Portola Hospital, a distance of twenty-five miles, where Dr. Bennett packed the wounds and placed him in bed. The same evening, he was taken to the Merritt Hospital in Oakland, having been encased in a double plaster of Paris spica. He arrived at the Merritt Hospital at 8:00 a. m., September 13, 1913, in the service of Dr. Alvin Powell, local surgeon.

He was suffering greatly from shock and loss of blood. The wounds were irrigated and cleansed externally, and the patient allowed to rest from the 13th to the 15th of September, during which time, he rallied somewhat from shock and his condition

seemed more hopeful.

I saw the patient in consultation with Dr. Powell on the morning of September 15th and examined him carefully under an anesthetic. The original cast was removed and the wounds irrigated. On inspection, it was found that the skin wounds were on the anterior interior surface of the thighs.

The wounds gaped and soft tissues protruded. The muscles of both thighs were extensively lacerated and divided. This was specially true of the anterior muscles of the thigh where they were literally torn across. The entire musculature of both thighs was in a most deplorable condition.

Both femoral arteries seemed to be intact and at this time there was no active hemorrhage. The immediate need in the case was for dependent drainage. Accordingly, free counter-incisions were made to insure adequate escape for fluids. Open cavities were thoroughly cleansed and packed with camphor-phenol gauze. It was found that the right femur had been comminuted, very extensively; the left broken across and maintained the ordinary position of femoral fragments with the fracture line near the middle.

It seemed that the left limb was in far better condition than the right. The patient was, then, placed in bed and dressed with voluminous gauze and cotton pads. Traction apparatus was applied to both lower limbs and eight or ten pounds weight attached.

On September 18th, patient complained of severe pain in the left limb, demanding anodynes. Temperature, 101°. On the 19th of September, there being manifest evidence of tension along the inner side of the left thigh, Dr. Powell freely opened the upper and interior femoral area, again establishing free drainage and a considerable amount of blood clot and tissue detritus was removed and the wound again packed.

During the following two days, the patient's condition was unsatisfactory. Hemoglobin remained at about 50. Red blood count, 2,800,000. A loud systolic murmur was heard at the apex and an ice bag applied over the heart. Laboratory reports showed a pure culture of colon bacillus.

On the 22nd of September, the wounds were, again, irrigated and a boric acid pack applied. On September 23rd, patient had a fair day and night, though he was slightly irrational. The wounds were looking well and the discharge was much less. Infection seemed to be of a mild type.

On September 24th, the heart sounds were fairly normal. Had a fair night and the outlook was altogether favorable. Continued in favorable condition during September 25th. On September 26th, had a slight hemorrhage from the left thigh, but lost very little blood. On the 27th of September, condition was still more favorable. On the afternoon of the 28th, had a severe hemorrhage from the inner side of the left thigh. An Esmarch was applied immediately, and within the next one-half hour, Dr. Powell ligated the left femoral artery. At this time, he was nearly exsanguinated.

In spite of the free use of normal saline, he died seven hours after the operation. Post-mortem examination revealed the fact that the left femoral artery was eroded and split for one and onequarter inches in the lower part of the wound.

Résumé: A young, robust man. Open fractures of both femora. Extensive comminution of one. Ghastly injuries of soft parts of both thighs. Division and disintegration of musculature. Free initial hemorrhage. Primary infection. Removal of patient from place of accident to an emergency hospital, twenty-five miles distant. Second removal, two hundred miles, to another hospital. Administration of ether on three different occasions.

Patient survived for fifteen days, at which time, the wounds were granulating, infection was well under control, and there was a good prospect for recovery. At this point, there was a sudden fatality from hemorrhage from the femoral artery. The points to which attention is especially directed are, as follows:

- (a) In the presence of very grave injuries involving multiple fractures, with separation and attrition of soft parts plus initial infection, there is reasonable hope under ordinary circumstances of ultimate recovery.
- (b) That the control of infection demands ample provision for drainage through liberal counter incisions, application of antiseptic solutions and packing of cavities with camphor-phenol gauze.
- (c) That such fractures should be dressed loosely. Tension through tight bandages and splints, such as plaster of paris, should be avoided. Gentle traction will provide, temporarily, for adequate adjustment of bony fragments.
- (d) Secondary hemorrhage should be anticipated and at the first warning, a tourniquette should be adjusted so as to be applied instantly, if required.

Finally, when possible, full provision for transfusion should be made. Appliances should be at hand and this measure undertaken as soon as the bleeding vessel is ligated.

Had we succeeded in avoiding the final disaster in this case, it seems probable that a satisfactory result would have been attained in the left and, possibly, in the right leg.

THE ADVENT OF CHINESE DOCTORS INTO CALIFORNIA.

By J. F. GIBBON, M. D., San Francisco.

Some forty years ago two white men wanting to make money conceived the idea of employing a shrewd Chinaman (he subsequently proved shrewd all right!) to play doctor at a salary of \$100 per month. The Chinaman's name was Li Po Tai.

A store was rented on the corner of Washington street and Washington alley, opposite Brenham place, opposite the northeast corner of the Plaza. The store was decorated with Chinese flags and mysterious hieroglyphics, etc. In the rear part of the store was a Chinaman cooking the herb tea. In the front part of the store was a large square table, on it was a fancy cushion and beside it sat the great Chinese Doctor Li Po Tai from China, who cures all diseases with herb tea only, consultation free, ready for business, his white employers working the town on the outside telling of the wonderful cures the great Chinese Dr. Li Po Tai was effecting with herb tea, "consultation free."

When the sick man or woman called for free consultation, Dr. Li Po Tai would put on a large pair of spectacles, look wise, tell the patient to place the back of the hand on the cushion, feel the pulse or pretend to look at the tongue, study the case and say liver and kidney disease, or no blood in the heart, and would cure with herb tea for \$10 a week, to be paid in advance, which was always the case.

The patient must come to the office to drink the tea. The trick was to have all come to the office so all could see the immense practice the doctor had. The scheme worked all right and money came in fast and the practice of the great Chinese doctor increased rapidly for many months.